



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/580,945	05/30/2000	Felipe Knop	POU9-2000-0017-US	1278
7590	08/20/2004		EXAMINER	
Kevin P Radigan Esq Heslin & Rothenberg PC 5 Columbia Circle Albany, NY 12203			QURESHI, AFSAR M	
			ART UNIT	PAPER NUMBER
			2667	5
DATE MAILED: 08/20/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/580,945	KNOP ET AL.
	Examiner Afsar M Qureshi	Art Unit 2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1-3,10,11,13-15,22,23,25-27,34 and 35 is/are rejected.
- 7) Claim(s) 4-9,12,16-21,24,28-33 and 36 is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_.

**DETAILED ACTION**

1. The indicated allowability of claims 1-36 is withdrawn in view of the newly discovered reference(s) to Crawley (US 6,321,270). Rejections based on the newly cited reference(s) follow.
  
2. Applicant is advised that the Notice of Allowance mailed is vacated. If the issue fee has already been paid, applicant may request a refund or request that the fee be credited to a deposit account. However, applicant may wait until the application is either found allowable or held abandoned. If allowed, upon receipt of a new Notice of Allowance, applicant may request that the previously submitted issue fee be applied. If abandoned, applicant may request refund or credit to a specified Deposit Account.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 10, 11, 13-15, 22, 23, 25-27, 34 and 35 are rejected under 35 U.S.C. 102(e) as being anticipated by Crawley (US 6,321,270).

Claims 1, 13 and 25. Crawley discloses a control point 22 (group leader) and nodes 14, 16, 18, 26, 28 and 30 of the group (see figure 1, col. 5, lines 50-61).

The control point 22 sends control information (group connectivity messages) regarding connections in use and network topology to the member nodes (figure 3, box 64, and col. 5, lines 4-17),

If no change is identified then no messages are sent and the procedure continues to test for changes,

The control point 22 only re-initiates sending control information to group members if there are changes to network topology (see fig. 3, boxes 66,68 and 70, also, col. 5, lines 18-35).

Claims 2, 14 and 26. Crawley teaches using multicast routing protocols distributing multicast group membership information to all nodes in the network wherein control nodes broadcast periodically [a heartbeat frame], that includes the identity of the originating node as well as its distance-to-core, to ensure continued presence of each node in the group, which is same as 'heartbeat protocol' (see col. 1, lines 54-66).

Claims 3, 15 and 27. Crawley teaches that the invention can be implemented in heterogeneous networks environment (see col. 3, lines 43-55, fig. 1).

Claims 10, 22, 34. This limitation is already discussed in the rejection of claim 1 above.

Claims 11, 23, 35. Crawley discloses that no acknowledgment messages are sent during or as a result of sending data or when the data is interrupted or reinitiated (see figure 3).

***Allowable Subject Matter***

4. Claims 4-9, 12, 16-21, 24, 28-33 and 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The cited art fails to disclose at least two adapters in a node coupling to at least one node to at least two networks (claim 4) and a local connectivity table values used to match nodes and group connectivity messages in order to identify whether or not a local adapter belongs to a different adapter membership group or become disabled, as claimed in application claim 9 herein.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Liang et al. (US 5,732,086) disclose method for determining the topology of a reconfigurable multi-nodal network.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Afsar M Qureshi whose telephone number is (703) 308 8542.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (703) 305 4378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**AFSAR QURESHI**  
**PATENT EXAMINER**  
4 August 2004